

Math 241, Problem Set #7  
(due **in class** Fri., 11/1/13)

Stewart, section 11.6, problems 12, 26, 51, 52(a).

Stewart, section 11.7, problems 2, 24, 34, 47.

Stewart, section 11.8, problems 12, 18, 30, 48. Please use the (original or modern) method of Lagrange multipliers to solve these problems.

Also:

- A. Use Lagrange multipliers to find the maximum value of the function  $f(x, y) = y - x^2$  on the disk  $\{(x, y) : x^2 + y^2 \leq 1\}$ .
- B. Re-derive the result of problem A using just high school algebra (no calculus at all).